POWERFUL CLASSROOM PRACTICES THAT AFFECT ASSESSMENT RESULTS

Powerful Classroom Practices that Affect Assessment Results

Academic Vocabulary: *Strategies for creating multidisciplinary lessons that will boost student achievement*

Instructional Strategies: *Emphasize evidence-based best practices*

Testing Tip and Tools: *Practices across the curriculum for best impact and results*

Activity: Hmmm and Ha by Jonathan Gibson

What the DATA?

AzMERIT

- Snapshot of student performance
- Higher proficiency expectations
  - Tied to Arizona's 2016 ELA and Math Standards
  - Similar to expectation on other assessments
- Results are focused on student proficiency

Formative/ Benchmark

- Full picture of student performance
- Graduated proficiency expectations
  - Tied to Arizona's 2016 ELA and Math Standards
- Results are focused on student growth and guide instruction

Academic Vocabulary

Academic Vocabulary

Arizona English Language Arts Standards

Reading Standards for Literature

Key Ideas and Details

9-10.RL.1– Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

9-10.RL.2– Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

9-10.RL.3– Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.

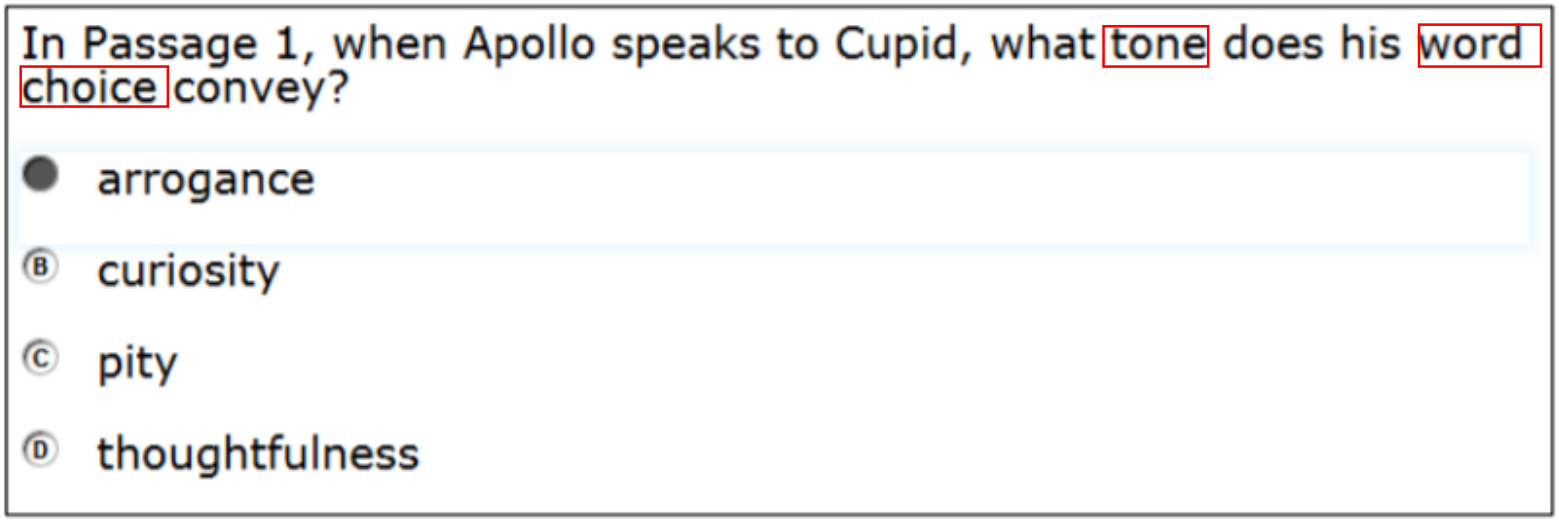
Craft and Structure

9-10.RL.4– Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone.

9-10.RL.5– Analyze how an author's choices concerning how to structure a text, order events within it, and manipulate time create such effects as mystery, tension, or surprise.

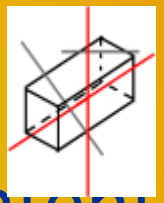
9-10.RL.6– Analyze how points of view and/or cultural experiences are reflected in works of literature, drawing from a variety of literary texts.

9-10.RL.4:Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone.



Arizona Math Standards 7.G.A.3

Describe the two-dimensional figures that result from slicing three-dimensional figures.



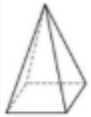
GEOMERTY

Content Emphasis: (supporting content)

Draw, construct, and describe geometrical figures and describe the relationships between them

7.G.A.3: Identify two dimensional shapes formed by the intersection of a plane and prism or pyramid.

A square pyramid is shown.



The pyramid can be sliced horizontally or vertically.

Select all of the shapes that could represent the cross section of the pyramid.

- [x] 
- [ ] 
- [x] 
- [x] 
- [ ] 

Item Specifications

A1.A-REI.D.10

Content Standards	Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve, which could be a line.
Explanations	Represent and solve equations and inequalities graphically.
Content Limits	This standard is aligned to Algebra I only. Linear and exponential equations
Context	Context is allowed.

Sample Task Demands	Common Item Formats
Students will be required to identify coordinates of points that lie on the graph of a given equation.	• Equation Response • Graphic Response • Multiple Choice Response • Multi-Select Response
Students will be required to plot points that are solutions to a given equation.	
Students will be required to identify other possible solutions to a given equation, type of equation, and/or the graph of a solution to the equation.	

Performance Level Descriptors

Minimally Proficient	Partially Proficient
Identify the graph of an equation in two variables.	Identify a solution given the graph of an equation in two variables.
Proficient	**Highly Proficient**
Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve, which could be a line.	Explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve, which could be a line.

Activity – Use Item Specifications to create an ELA or Math Item.

1: Identify Academic Vocabulary within the Standard

2: Create item using Academic Vocabulary

3: Clone additional Item Type

4: SHARE

Multiple Choice	Multi-Select
Hot Text/ Grid	Open Response/ Equation Editor

AzMERIT Resources

Tweet Share

ELA and Math Resources

- AzMERIT Writing Guides and Rubrics
- Writing Resources
- Reading Resources
- Math Resources

AzMERIT Resources

- AzMERIT Blueprints and Cut Scores
- AzMERIT Sample Tests
- Item Specifications
- Performance Level Descriptors

http://www.azed.gov/assessment/resources/

AzMERIT | Arizona's Statewide Achievement Assessment for English Language Arts and Mathematics

Instructional Strategies

Classroom Practices

Highlighting Key Information

Using Storyboards/Organizers

Citing Sources

Building Procedural Fluency from Conceptual Understanding

Posing Purposeful Questions

Using Tools Strategically

Highlighting

AzMERIT Highlighting

Source 3: Keep Students Focused on Schoolwork

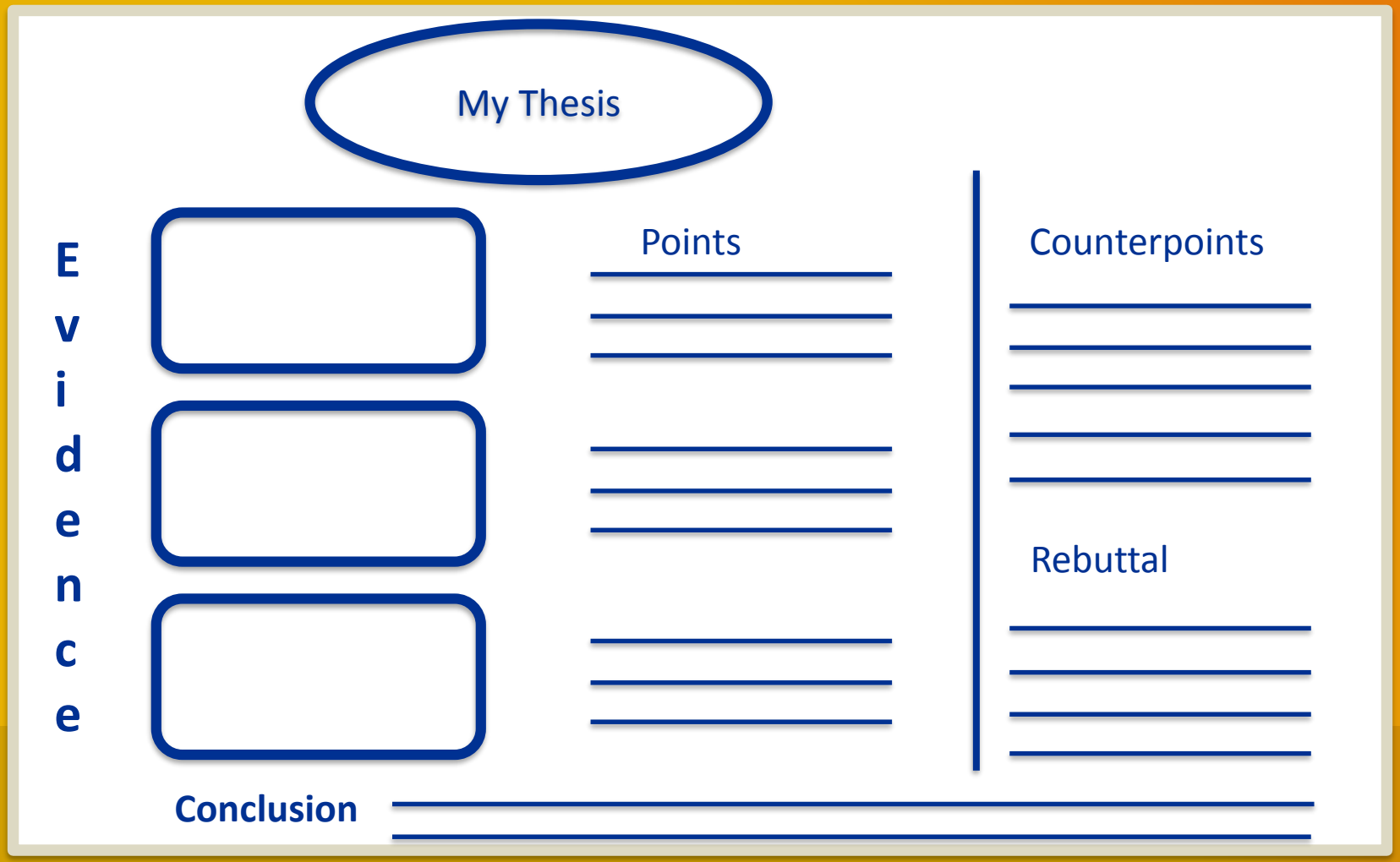
by Luz Chavez

sounds like a good idea at first. Students learn how to be responsible. They practice working in groups. They keep the school looking great. However, there are many reasons these jobs should be left to adults.

10 Students lead busy lives. They have classwork, homework, after-school activities, and chores at home. Many parents are already concerned that their children have too much homework. Teachers often worry about having enough classroom time to teach and prepare students. Many

AzMERIT Sample Test Grade 4

Storyboard for Argumentative Writing



Storyboard for Argumentative Writing

Students contributing to schools is beneficial

Evidence

Benefits of contributing

Points

Orange - Responsible, work in groups, school clean

Counterpoints

Purple - Classwork, homework, chores, after-school activities

Rebuttal

Conclusion

Informative/Explanatory	Total Points:	Opinion/Argumentative
Purpose, Focus, and Organization	4	Purpose, Focus, and Organization
Evidence and Elaboration	4	Evidence and Elaboration
Conventions	2	Conventions

Things to Remember:

While students are encouraged to quote or paraphrase from the text, they must elaborate with their own original thoughts and ideas.

To be scored, a student response must include at least 30% original text.

	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 10	Gr 11
Prompt Copy Match	11%	6%	6%	6%	6%	4%	4%	3%	2%

Integrating Evidence

- Quoting
- Paraphrasing
- Summarizing*
- Natural Evidence

Quoting
Use a direct quote from the original source.

Example:
According to the article, "Your helmet should have a sticker that says it meets standards set by the Consumer Product Safety Commission" (Dowshen, 2014).

Integrating Evidence

- Quoting
- Paraphrasing
- Summarizing*
- Natural Evidence

Paraphrasing
Rephrase the quote in your own words.

Example:
The KidsHealth article states that you should look for a helmet with a sticker from the Consumer Product Safety Commission (CPSC).

Integrating Evidence

- Quoting
- Paraphrasing
- Summarizing*
- Natural Evidence

Summarizing*
Using only the main points of the source in your own words.

Example:
The KidsHealth article discusses why bike safety is important, how to use a bike helmet, where to ride, road rules, and using hand signals.

Integrating Evidence

- Quoting
- Paraphrasing
- Summarizing*
- Natural Evidence

Natural Evidence Integration
Taking phrases from the source and use them in your argument.

Example:
Wearing a bike helmet is so important that the government created stickers for those helmets that meet "standards set by the Consumer Product Safety Commission (CPSC)."

Citation Engines

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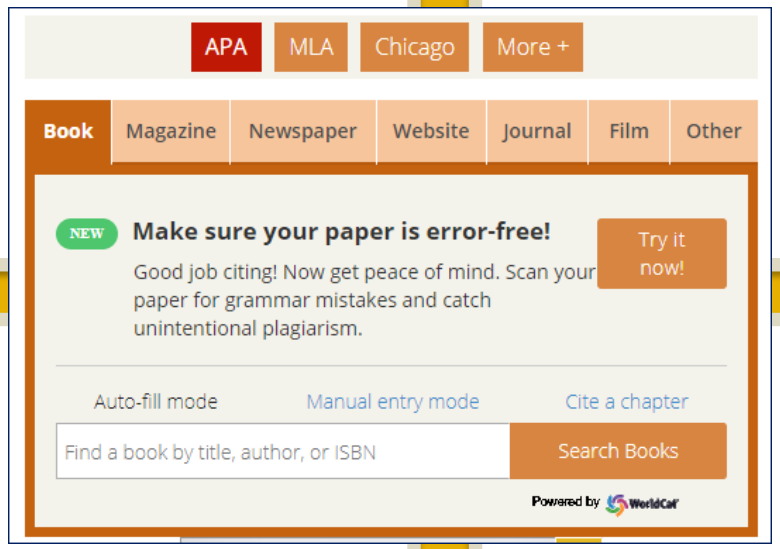

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Mathematical Fluency – applying mathematics accurately, efficiently, and flexibly (CCSSI, 2009).

- Provide students with opportunities to use flexible strategies and methods for solving problems.
- Model efficient procedures as needed.
- Connect student-generated strategies with efficient procedures.
- Practice should be brief, engaging, purposeful, and distributed.

Highlighting

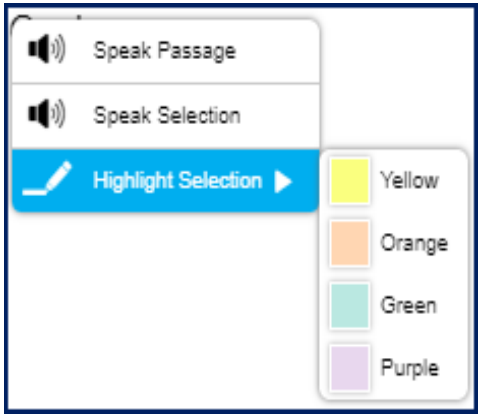
16

A survey of 525 people was conducted to determine whether they have brothers and sisters.

- The results showed that 24% of the people surveyed do not have a sister and 68% of the people surveyed have a brother.
- The results also showed that 93 of the people surveyed do not have a sister and do not have a brother.

Complete the two-way frequency table to show the results of the survey.

	Have a Brother	Do Not Have a Brother	Total
Have a Sister			
Do Not Have a Sister			
Total			525



AzMERIT Sample Test Algebra I

Problem Solving	
Problem: ***Underline*** *key words.* *Put a box around the question.*	
Decide on a strategy. Show your work.	**Check and label your work**

Problem Solving	
Problem: Five children are playing on the playground. The teacher called the children in for a snack. She had 20 cookies. How many cookies did each child get? ***Underline*** *key words.*	*Put a box around the question.*
Decide on a strategy. Show your work. Draw a picture: XXXX XXXX XXXX XXXX XXXX	**Check and label your work** 20/5 = 4 Each child got 4 cookies.

Pose Purposeful Questions

PBS Teacherline Tips for Developing Mathematical Thinking

- To promote problem solving
- To make connections
- To encourage reflection
- To check progress
- To encourage conjecture
- To build confidence

Developing Mathematical Thinking with Effective Questions

To promote problem solving, ask...

- What information do you have? What do you need to find out?
- What strategies are you going to use?
- Will you do it mentally? With pencil and paper? Using a number line?
- What tools will you need? Will a calculator help?
- What do you think the answer or result will be?

To promote problem solving, ask...

- How would you describe the problem in your own words?
- What facts do you have?
- What do you know that is not stated in the problem?
- How did you tackle similar problems?
- Could you try it with simpler numbers? Fewer numbers? Using a number line? What about putting things in order?
- Would it help to create a diagram? Make a table? Draw a picture?
- Can you guess and check?
- If you compared your work with anyone else's, what did they try?

To make connections among ideas and applications, ask...

- How does this relate to...?
- What ideas that we have learned were useful in solving this problem?
- What uses of mathematics did you find in the newspaper last night?
- Can you give me an example of...?

To encourage reflection, ask...

- How did you get your answer?
- Does your answer seem reasonable? Why or why not?
- Can you describe your method to us? Can you explain why it works?
- What if you had started with... rather than...?
- What if you could only use...?
- What have you learned or found out today?
- Did you use or learn any new words today? What did they mean?
- What are the key points or big ideas in this lesson?

Do you want to develop additional mathematical thinking strategies for your teaching practice?

Visit www.pbs.org/teacherline to view our Mathematics professional development options.

PBS TeacherLine
REMARKABLE RESOURCES FOR TEACHING AND LEARNING
www.pbs.org/teacherline

Developing Mathematical Thinking with Effective Questions

To help students build confidence and rely on their own understanding, ask...

- Why is that true? How did you reach that conclusion?
- Does that make sense?
- Can you make a model to show that?

To help students learn to reason mathematically, ask...

- Is that true for all cases? Explain.
- Can you think of a counterexample?
- How would you prove that?
- What assumptions are you making?

To check student progress, ask...

- Can you explain what you have done so far? What else is there to do?
- Why did you decide to use this method?
- Can you think of another method that might have worked?
- Is there a more efficient strategy?
- What do you notice when...?
- Why did you decide to organize your results like that?
- Do you think this would work with other numbers?
- Have you thought of all the possibilities? How can you be sure?

To help students collectively make sense of mathematics, ask...

- What do you think about what ____ said?
- Do you agree? Why or why not?
- Does anyone have the same answer but a different way to explain it?
- Do you understand what ____ is saying?
- Can you convince the rest of us that your answer makes sense?

To encourage conjecturing, ask...

- What would happen if...? What if not?
- Do you see a pattern? Can you explain the pattern?
- Can you predict the next one? What about the last one?
- What decision do you think he/she should make?

PBS TeacherLine
REMARKABLE RESOURCES FOR TEACHING AND LEARNING
www.pbs.org/teacherline

Adobe Acrobat Document

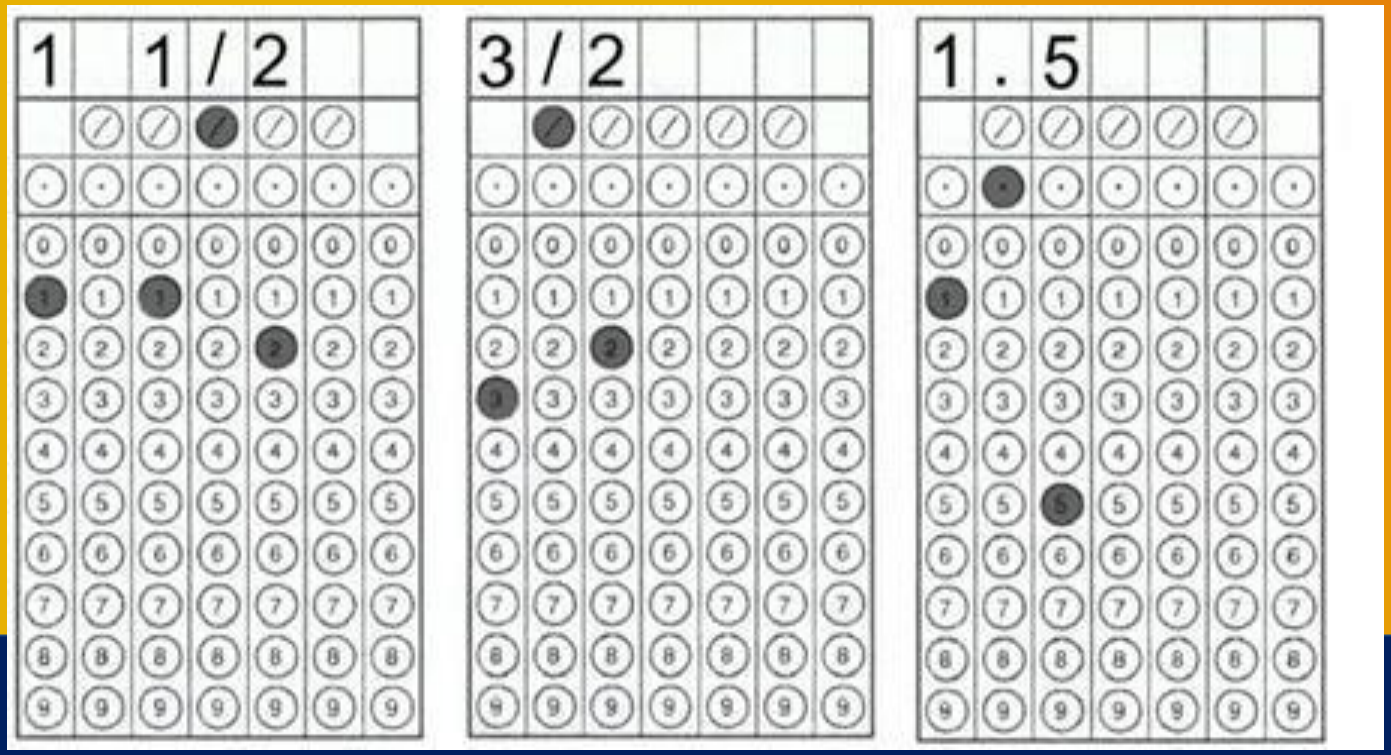
Activity

Pair –Share Strategies

- Pre and Post Test Strategy
- Vocab Strategy
- Highlighting important details or information
- Writing Plan and using Text- based evidence

Testing Tips and Tools

Grid-In Response Items for PBT



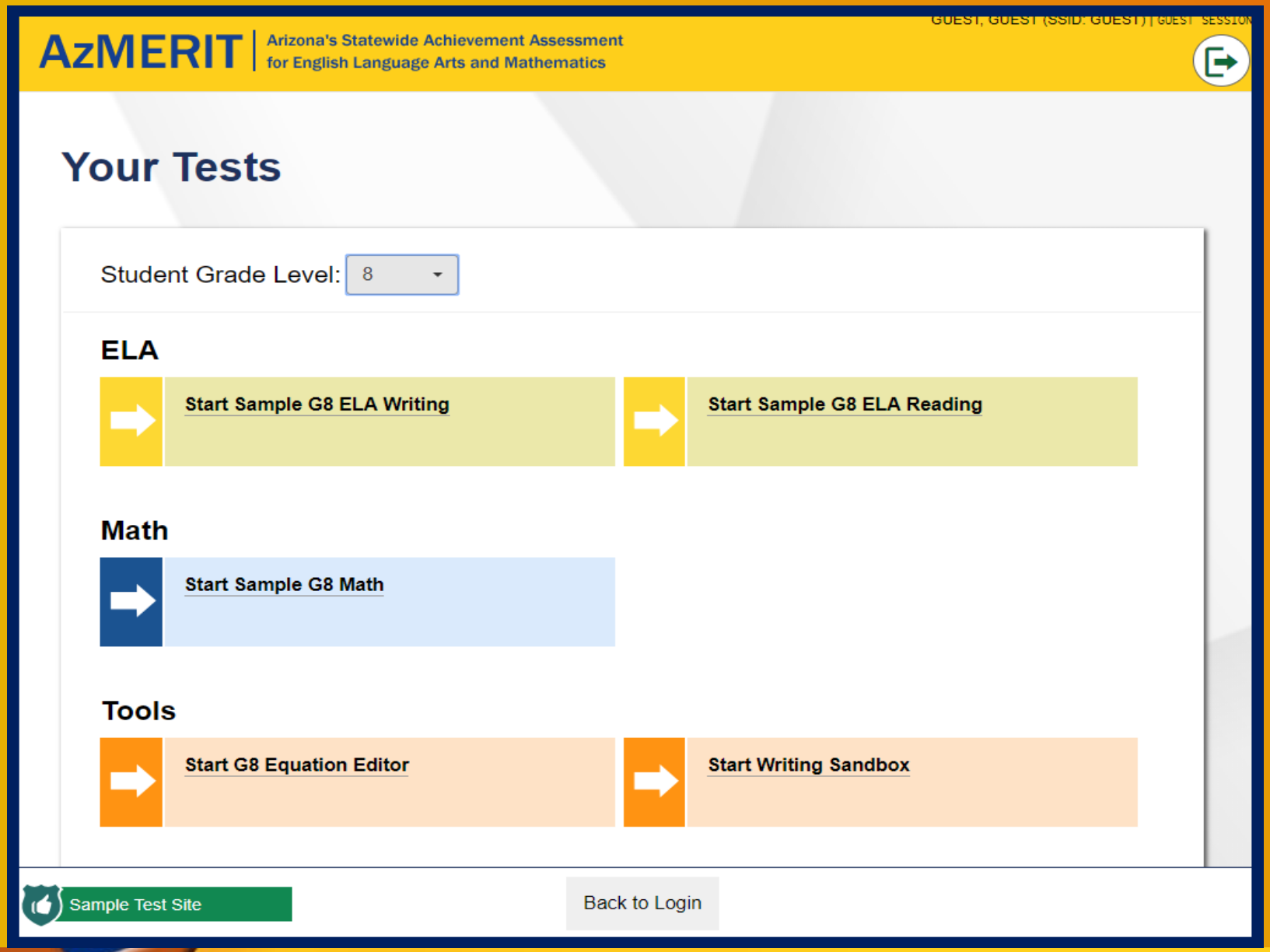
Any correct response is accepted

Issues:

Not putting a space between whole numbers and fractions

Filling in two circles in the same column

Not filling in the circles



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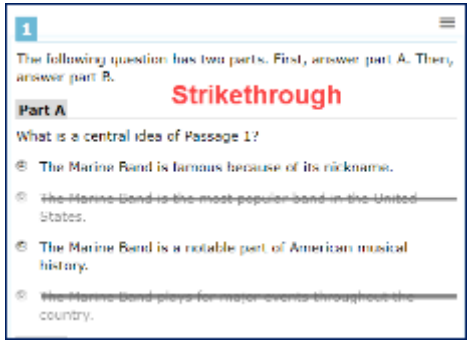
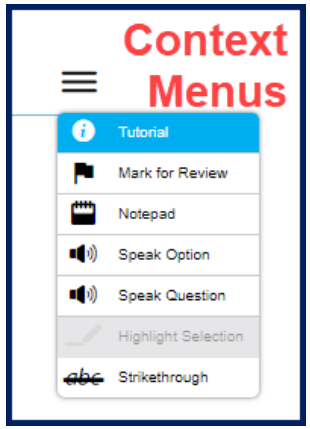
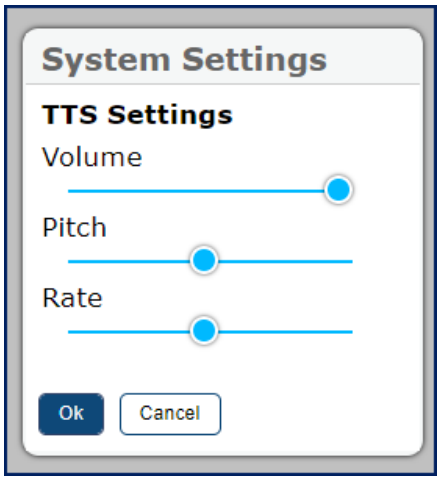
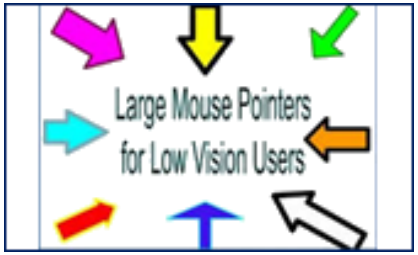
Using Tools Strategically

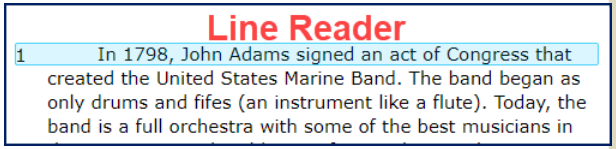


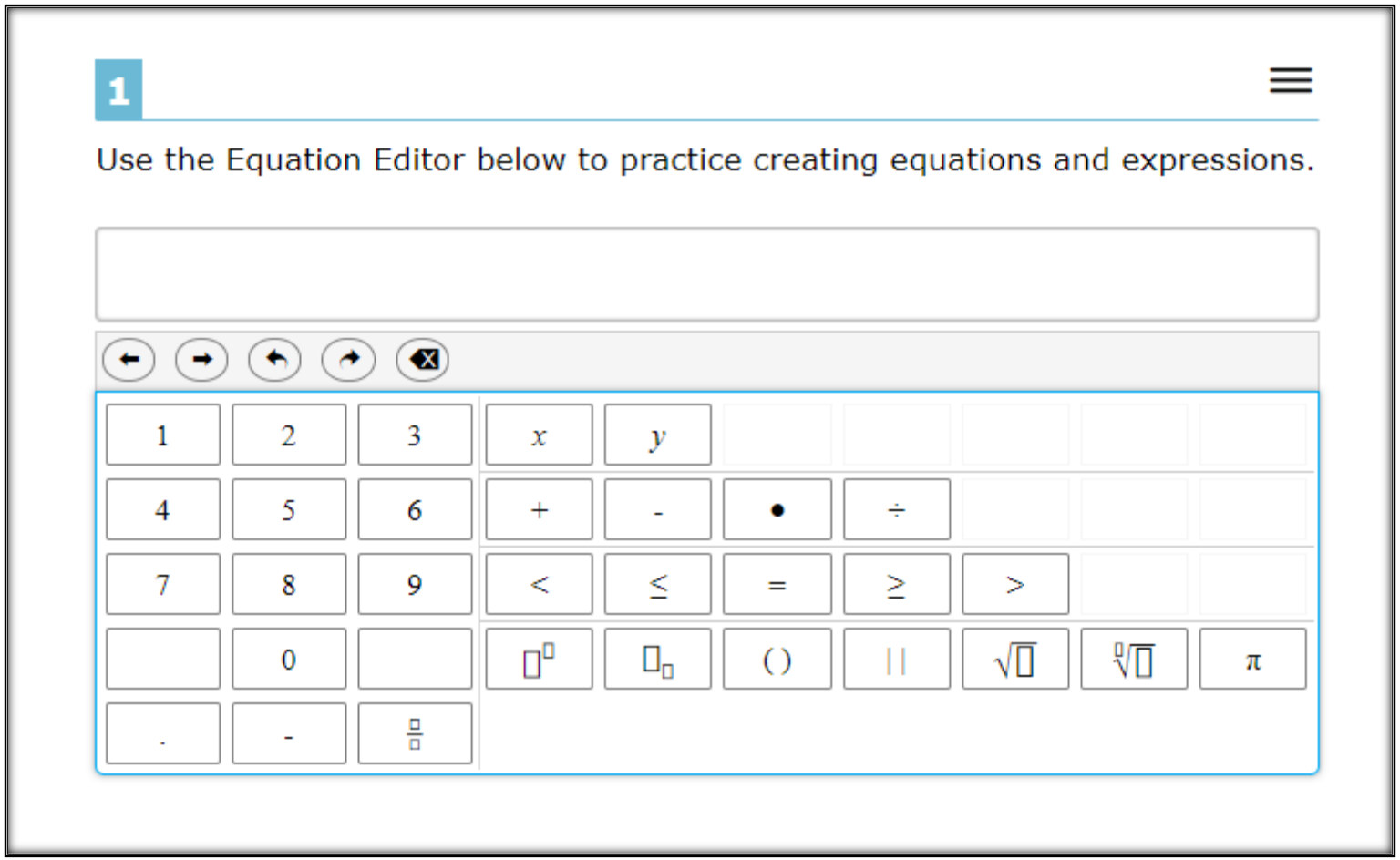




AzMERIT Tools



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Use the Equation Editor below to practice creating equations and expressions.
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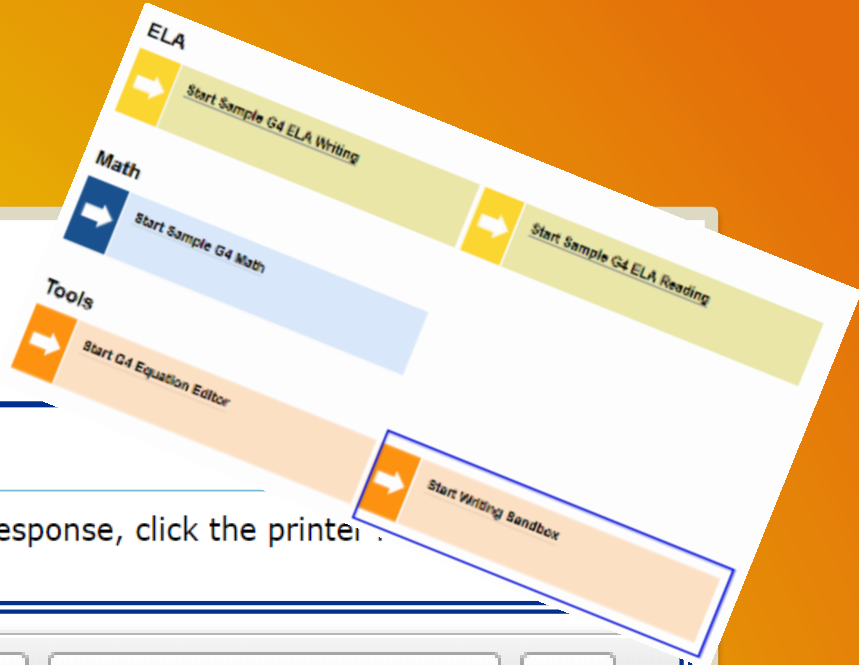
4 5 6 + - • ÷
7 8 9 < ≤ = ≥ >
0 ( ) | | π
.

Sample Test Tool



Sandbox

1

Type your answer in the space provided. To print your response, click the printer
side of the toolbar just above the answer space.

Words 0/4000, # Chars 0/20000

Testing Time – AzMERIT 2018

Grade	ELA Average Time Hours : Minutes 3 test sessions	Math Average Time Hours : Minutes 2 test sessions
3	3:48	1:44
4	3:44	1:46
5	4:04	1:56
6	4:03	1:59
7	3:45	2:00
8	3:26	1:55
9/Algebra I	2:40	1:42
10/Geometry	2:35	1:36
11/Algebra II	2:22	1:28

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ADE Suggested Times
ELA 2:15 – 4:00 hours
Math 2:00 - 2:50 hours

Contact Us!

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